

Amendments to the Claims:

This listing of claims will replace all prior versions in the application:

Claims 1-16 (cancelled)

17. (currently amended) An isolated nucleic acid encoding a G-protein coupled receptor polypeptide, ~~the nucleic acid encoding a polypeptide comprising wherein the polypeptide transduces an increase in intracellular calcium and comprises~~ greater than 85% amino acid identity to ~~an~~ the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:18.

18. (currently amended) The isolated nucleic acid of claim 17, wherein the nucleic acid encodes a polypeptide having at least ~~50~~ 200 contiguous amino acids of ~~an~~ the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:18.

Claims 19-22 (cancelled)

23. (currently amended) The isolated nucleic acid of claim 17, wherein the nucleic acid ~~is amplified by primers that specifically hybridizes under stringent hybridization conditions comprising 50% formamide, 5X SSC and 1% SDS at 42°C and wash conditions comprising 0.2XSSC and 0.1% SDS at 65°C to a nucleic acid having the a nucleotide sequence of SEQ ID NO:15 or SEQ ID NO:17.~~

Claims 24-48 (cancelled)

49. (currently amended) The isolated nucleic acid of claim 17, wherein the nucleic acid encodes a polypeptide comprising ~~great~~ greater than 90% identity to ~~the~~ ~~an~~ amino acid sequence of SEQ ID NO:16 or SEQ ID NO:18.

50. (currently amended) The isolated nucleic acid of claim 17, wherein the nucleic acid encodes a polypeptide comprising great greater than 95% identity to the an amino acid sequence of ~~SEQ ID NO:16 or SEQ ID NO:18.~~

51. (currently amended) An isolated nucleic acid encoding a G-protein coupled receptor polypeptide, wherein the polypeptide transduces an increase in intracellular calcium and comprises comprising at least 50 200 contiguous amino acids of the an amino acid sequence of SEQ ID NO:16 or SEQ ID NO:18, wherein the polypeptide has GPCR activity.

Claims 52-54 (cancelled)

55. (currently amended) The isolated nucleic acid of claim 51 wherein the nucleic acid comprises at least 600 contiguous nucleotides of ~~SEQ ID NO:15 or SEQ ID NO:17.~~

56. (new) An isolated nucleic acid encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:18.

57. (new) An isolated nucleic acid comprising the nucleotide sequence of SEQ ID NO:17.

58 (new) An expression vector comprising the nucleic acid of claim 17, claim 51, claim 56, or claim 57.

59. (new) A host cell transfected with the vector of claim 58.